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THE BIOLOGY & SEX



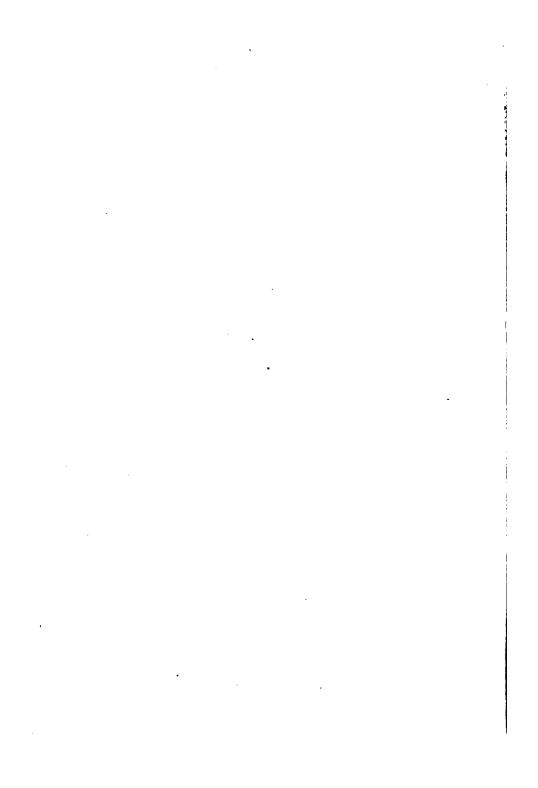
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We BIOLOGY f SEX

A STUDY OF THE SEX PROB-LEM ACCORDING TO THE LATEST FACTS DISCLOSED BY BIOLOGY & EVOLUTION

BY GIDEON DIETRICH



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CHAPTER I.

INTRODUCTORY.



O MORE important social problems are pressing for immediate solution than that group of questions we classify un-

der the term "sex problems." Every day the record of events furnishes us with numerous tragedies resulting from the struggling individuals trying to harmonize their inner natures with the conventional teachings and artificial code of sex ethics

Never in the history of the human race has there been as much crime, insanity, misery and degeneracy, resulting directly from abnormal sex lives, as at the present day. That our social consciousness is beginning to realize the seriousness of these conditions is evidenced by the fact that of late we have been overwhelmed with lit-

erature and discussions on how to solve these problems.

Most of these, however, have followed along some conventional groove, each author advocating remedies which will harmonize with a pet theory of ethics or philosophical cult, without trying to find the scientific factors involved in the problems themselves. Such a course must necessarily leave the subject in a very chaotic condition; and up to the present time we have no clearly defined premise formulated as to how they are to be solved.

It must be conceded by all that if we ever accomplish any substantial sex reforms they must be brought about in a systematic manner and along scientific lines.

In no field of investigation have there been more important scientific facts revealed than that of biology; and these are especially important facts, having a direct relation to these problems, as well as to life in general—what it is, how species are formed and propagated, and what really is the nature of this phenomenon we call sex.

The facts themselves are recorded in scientific [8]

works, and while we have an abundance of popular literature on this subject, yet most writers have entirely ignored or misinterpreted these facts, so that their deductions in most cases have a vital defect which tends to destroy the value of their whole work.

To briefly present some of the most important scientific discoveries related to this subject, pointing out their correct interpretation and formulating the facts in a logical order so as to form a scientific basis for the discussion and solution of sex problems, is the object of this treatise.

While I have endeavored to present the subject in as clear and concise a manner as possible, yet it is nevertheless a study, and the facts must be carefully considered to fully comprehend their far-reaching importance to our entire social structure and sex ethics.

Perhaps the greatest difficulty which the average reader will have in obtaining a correct view-point of the whole subject will be to realize the fact that the phenomenon of sex is something entirely distinct from the process of propagation. The two have been so intimately associated

in the popular mind, from purely natural causes, that it will no doubt be difficult to think of sex without considering it an elementary part of propagation.

We have obtained our common conception of sex and propagation from their most complex expressions as seen among the higher plants and animals. Here the two are so intimately interwoven that their secondary relation to each other is almost impossible to distinguish. We have been taught in a vague manner that in the lower forms of life there is not such a close relationship and that propagation is sometimes carried on without the aid of sex.

It has been only within the last decade that science has succeeded in completely separating the two into their simple factors, and this fact will now enable us to clearly understand the nature of each one and what relation sex and propagation have to each other.

First, it is now a well-established scientific fact that all the different forms of propagation, such as sexual, asexual, budding, etc., are only expressions of one basic process, and that is a [10]

process of cell-division. No matter how complex the form of propagation may appear, the fundamental principle which underlies all forms is a process of cell-division. It is therefore evident that in order to understand propagation and just what is implied in the act we must make a closer analysis of cell-division, which will be attempted in the next chapter.

Aside from the complex secondary aid which sex has given to the process of propagation among the higher forms of life, the most important fact which has always led to the conclusion that the two must have an elementary relation is the fact of fertilization. We might easily understand how species could be propagated without the secondary aid given by sex if it were not for the seemingly elementary act of fertilization. In fact, it is well known that among the lower forms the complete propagation of individuals is constantly carried on without an act of fertilization, and this parthenogenetic form is so common that it has always served as the most difficult fact to be harmonized with the theory of the

elementary propagating nature of sex and fertilization. That propagation is accomplished in this manner should have suggested to a logical mind that sex and fertilization cannot be an elementary part of the propagating process, but so persistent is a false theory when once firmly rooted into the public consciousness that even some of our most advanced scientists cannot get over the habit of speaking about "sex elements."

The term "sex elements" is always used in the sense that they are reproductive elements; or as we speak of oxygen and hydrogen as elements, and their proper chemical union (re)produces water (offspring). Now, if the theory that sex is an expression of reproductive elements be correct, then there can be no propagation in any form without the union of these two elements unless we assume a duality of primary forces instead of a monistic unity of an ultimate cause.

Such an assumption would, however, not be entertained by any clear-thinking mind at the present day, so that we are forced to the conclusion that the propagating process is essentially [12]

one in its basic principle, and that the fertilizing union of two living units is only a secondary factor in the process.

It is now not even necessary to reach this conclusion by the deductive method, but scientific experiments have clearly demonstrated that the act of fertilization is only a *life-saving act* and in no sense a reproductive or life-creating act.

In the "Dynamics of Living Matter," Professor Jacques Loeb, the author, has proven conclusively through his own experiments and through the experiments of other workers in this field of biology, that the act of fertilization has only a catalytic chemical effect upon a living process WHICH EXISTS; and so it does not produce life nor create a new living unit. Both he and others have shown repeatedly that the unfertilized eggs of sea-urchins and those of other lower forms may be restored to a growing fertilized equilibrium through the catalytic effect of a special salt solution in which they are placed. The unfertilized male germ units may also be restored to a growing condition by allowing them

to penetrate into living plasm from which the hereditary nucleus has been removed.

Now, a chemical catalyzer acts from a distance or through its mere presence, without forming a direct chemical union with the substance acted Thus the mere presence of nitric acid will change starch into dextrose without forming a direct union with the starch; and the enzymes and ferments of biology are known as catalyzers and their action is considered by scientists to express one of the basic principles of the living process.

It is self-evident that such artificial restoration of a fertilized equilibrium within germ units cannot imply the union of reproductive sex elements, but the fertilization is purely the result of a catalytic substance acting as a chemical catalyzer. It is not essential to the point here at issue to know whether all germ units, both male and female, could be restored to a growing equilibrium in an artificial manner, or whether such knowledge would be of any practical value; but the fact remains that if it can be accomplished in some, then, according to the law of unity, ALL [14]

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FERTILIZATION is purely the result of catalytic action; and with the establishment of this fact the old theory of the elementary reproductive nature of sex is completely wiped out, root, trunk and all its branches.

From this scientific point of view we will be compelled to interpret the entire phenomenon of sex in terms of *fertilization* or *sex-love*, and also be compelled to completely abandon our old interpretation from the viewpoint of its elementary propagating nature.

Sex, sex characters, sex organs, sex functions, sex expressions, all must be explained in the light of sex-love and as secondary aids to propagation.

CHAPTER II.

PROPAGATION AND SEX.



T BEING now an established scientific fact that propagation is merely a process of cell-division, and that sex and all ex-

pressions and functions of sex are only secondary factors of propagation, in order to understand both of these phenomena we must make a closer study of cell-division and see just what is implied in the process.

Cell-division is one of the most fundamental processes of life and of our very existence, and it seems strange that up to the present time we have devoted very little popular study to this process. As generally used in biology, the term cell-division means the splitting apart of one living unit into two or more new units.

Herbert Spencer promulgated this law of cell-[16]

division: That the organized unit is forced to divide itself in order to regain an equilibrium between its outer surface and its organized capacity. Although this implies a certain cause behind the act, yet it also includes a purposive object as a part of that cause. Viewing the living process without regard to any objective purpose it may have, it will be apparent that cell-division is only a normal expression of this process regardless of what the division or propagation may accomplish.

Professor Huxley compared living substance—protoplasm—to a whirlpool, and as life the liquid substance constantly flows through the whirlpool, so food matter flows through the plasmic whirlpool which forms the basis of all living beings. When there is a steady flowing movement through the whirlpool it maintains a fairly constant form and amount of mass; and only as the volume and force of the flowing substance is increased or diminished so is the whirlpool increased, reduced or exterminated,

If the in and out flow of food substance through the plasmic whirlpool would be evenly

balanced and so maintained, the living process would then be in the nature of a continuous immortal process, in contrast to the exhausting process of a fire; but the ever-changing forces of environment, in which and through which a living process must exist and make its very existence and continuance dependent upon a constant increase of a reserve amount of plasmic substance. In other words, the income of a living process must always be greater than the outflow, or from its very nature and conditions of existence the plasmic whirlpool would soon exhaust itself.

Now, under ordinary conditions such a gradual increase should result simply in an increase of mass or an increase of the size of the plasmic whirlpool; but living substance has within itself and within the forces through which it exists the distinct power of organization through which it becomes organized into distinct psychic centers and into definite specie-branches. As a result of this power the primary speck of plasm becomes organized into a living center, gathering within itself all of its objective experiences and accumu-

lating these within a nuclear structure as hereditary impressions upon its plasmic brain functions.

Organization itself means limitations, and before an organization can be increased it must first acquire an increased organizing capacity. Thus the organized living center must have a limited capacity of organization, or a limited amount of living substance which can exist around that center, and then as the amount of substance increases around the center of a living unit, the result must produce a distinct growing crisis within that unit. In other words, from the nature of an organization, and from the normal tendency of a living process to increase the amount of reserve plasm, there must be a distinct growing crisis reached in the life of every organized unit; and as a result of this growing crisis the unit is forced apart into two or more new living centers.

There is no expression of an altruistic purpose in the division, but it has resulted only from the action of a normal living process. All uni-celled beings are propagated as a result of this funda-

mental law of propagation (not re-production); and when such living units colonize into a higher complex organization every unit in that colony expresses this same periodic impulse of division as a result of its normal life. Thus the stemcell, out of which our own body was formed, reached this mature growing crisis and then was divided into two units. Next these two units reached their own mature growing crisis and then were divided into four units. Thus the propagating process continued until our whole body was constructed out of millions of these psychic living units.

This propagating process does not even end when we have reached a certain organic maturity, but as long as there is a normal living process within us, every healthy cell unit of our body must continue to reach a periodic growing crisis. Animal life has acquired the special habit of utilizing a large part of the accumulating plasmic substance in the performance of labor aside from what is needed for organic construction; but from the very nature of the living process it is evident that all surplus—which would pre-

vent a crisis—cannot be utilized in this manner without carrying the process toward exhaustion and death.

The result of a normal healthy living process is a mature growing crisis, and if this is not reached the process is moving toward the abnormal. (Let those who maintain that the sex function may be diverted into other channels or suppressed remember this law.)

When the process of propagation has brought the organic construction to a certain mature completeness (puberty), the capacity of the organization to receive additional units becomes reduced and gradually grows less and less, so that when the growing crisis is expressed, some of the new units will tend to become entirely separated from the rest, as having no position to fill in the colony, and as independent living units seek to make their escape from the parent colony. These separated units are known as germ units, both male and female, and under proper growing conditions they will develop into a new colony organization, similar to the parent one from which they became separated. They possess the power to do

this, under proper metabolic conditions, because each new unit carries with it, within its nuclear structure, the entire hereditary tendencies of the whole species to which the parent belongs.

The moment such a living unit becomes separated from the parent colony, that very instant the physiological fact of parent and offspring is established, and no vows of virginity or abstinence can ever change this great biological fact.

The question may be asked: Where is the origin of an altruistic parental care if propagation is only such an egoistic expression of a living process? It is a purposive object sought for, which will nearly always mislead us in finding the true cause of a phenomenon, and if there is no evidence of an altruistic impulse in a process of cell-division it is worse than useless to theorize such an impulse into it; but we should rather seek the cause of a parent's care for offspring in another direction which is in harmony with the facts of its development.

The very moment such germ units become separated from the parent organization, that very [22]

instant do they enter upon their struggle for existence. And as we know, this struggle is very severe through all life, from the very instant each unit becomes a separate entity, so each one must seek to gain all the advantages possible, through differentiation, organization and adaptability to environment.

One of the greatest of these advantages gained, by both the individual and evolving species, is that resulting from the fertilizing process.

This fertilizing advantage gained by the struggling unit will, however, be better understood by the reader after we have considered this process in another chapter. The great fact to be remembered here is this: That all living beings are propagated through a process of cell-division, and that all germ units, both the anabolic female and katabolic male germs, are formed through this same process, and are therefore distinct individualities in themselves, just as much so as the two parts of a divided protozoa, and that neither sex nor fertilization has an elementary part in the process of propagation.

In the process of life the individual is propagated before the distinct fact of sex is established, and even long before the advantage of fertilization can be gained by the struggling individuals.

CHAPTER III.

SEX DEVELOPMENT.



N CHANGING our viewpoint, the nature and character of an object will appear in an entirely new light.

In viewing natural phenomena in the light of the facts of evolution, the development of the Cosmos appears altogether different from what it did through the cloudy light of a "special creation story." Thus it will be if we change our viewpoint of the phenomenon of sex from that of its elementary "reproductive" nature to that of its being only nutritive expressions of a living process. If the reader will endeavor to remember this scientific principle, he will then be in a better position to understand the important facts presented in this study, and thus be able to get a more rational view of the nature of sex.

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The metabolic process of life has the nature of a continuing process, in contrast to the dying process of a fire. A primary living plasm is formed, into which food matter is constantly drawn and assimilated, and this tends to increase the amount of plasm and so perpetuate the process. It also has the power of organization and through the development of complex specie organizations, greater power is gained to maintain a continuous food supply with which to perpetuate the process. In the combustion of a fire there is no organizing plasm left in reserve to perpetuate the process and so a fire must die out when the immediate fuel matter (food) is consumed.

From this fact it is clearly seen what causes that strong selfish ego impulse within every living unit. This primary impulse of self-preservation is a vital part of the living process, to continue that process within the ego-center—not within an offspring, or new living unit, but only within the center of self—forever, if that is possible.

It is through this immortal impulse of an or[26]

ganized ego-center the development of all the different specie-forms was caused, each center struggling with all its power to adjust itself to its environments in order to perpetuate the living process within and around the organized ego. Now, environments never have been and never are the same for two consecutive moments, so that these eternal changes of the surrounding conditions must have a decided influence upon the living units who are struggling to adjust themselves to these conditions.

Aside from the great variety of species developed through these laws, this changeableness of conditions causes a fundamental influence upon the metabolic process of life, which tends to divide all living beings into two hereditary nutritive classes.

Thus under primeval conditions as well as those of the present, a certain combination of environments, such as low temperature, abundant food supply and food matter of a low degree of stimulation, the living process would tend toward a well-nourished anabolic direction, and if such conditions would continue for numerous

generations, such a tendency would become hereditary and so exert its influence upon succeeding generations. In this manner a predominating anabolic femaleness may easily be developed within some living units.

On the other side, a certain combination of environments, such as a stimulating temperature, scarcity of food and food matter possessing a high degree of stimulation, the living process would tend to be carried toward an active, hungry katabolic direction, which would gradually develop into a predominating maleness within some living units.

This hereditary maleness or femaleness is not brought about in one or two generations, and even after there is a decided tendency in one or the other direction, and there is then a radical change in the surroundings, or through some catalytic effect, the metabolic process in such units would be brought back to a fertilized equilibrium and might even be carried in an opposite direction. But if either combination of environments will continue to exert a distinct anabolic or katabolic influence for numerous [28]

generations, such influence must finally become hereditary and then exert a controlling force upon the metabolism of each unit.

When once established as hereditary factors, the anabolic or katabolic influence will carry the entire metabolism of uni-celled beings over to a decided maleness or femaleness; but in colony formation only a part of the organization will be affected directly and the rest is gradually affected by reflex influence. Organization implies an increased power of adjustment to surrounding influences, so that the hereditary and surrounding anabolic and katabolic influences would have their first or primary effect upon the least differentiated organism or the least differentiated part of an organism. Thus the somatic body of multi-cellular beings is affected only in a secondary manner by the anabolic and katabolic influences, while the primary germ tissues and germ units are the first to be directly effected and given a distinct male or female tendency.

Even in colony organization the hereditary influence of maleness or femaleness is at first so small that germ units arising at one time will

With the advance of organization the germ tissues of the colony are developed into germ glands, both male and female glands. Both classes of germ glands have become a part of the specie heredity, and so they are both transmitted to every succeeding offspring; and in nearly all the lower forms of life they are both developed in every being, making such organisms bi-sexual.

The primary germ tissues and germ glands are formed within the middle layer of colony units, and from here the germ units force their way out through the surrounding layers and thus form distinct passages which are called [30]

germ ducts, one duct leading out from each somatic germ tissue or from each germ gland.

In the lower organisms there are generally an indefinite number of these glands and ducts; but with the advance of organization their number gradually becomes reduced to only one pair of each class. Their pairs result from one developing on each lateral side of the body, but in some special cases only one is developed, the corresponding one remaining dormant in the individual.

Both the glands and ducts follow the line of excretory ducts, and in most cases the ducts become partially united with one or more of these before reaching the outer surface in a cloaca. The anabolic female glands generally remain within the abdominal cavity in which they are formed; but among higher animals the active katabolic glands move over the bladder, down and out into a scrotum pocket.

The character and development of the germ ducts are greatly modified by the anabolic and katabolic influence of the associate glands from which they lead. Thus the ducts leading from

the anabolic glands become well nourished, fully expanded, the two becoming united into a trunk duct which leads directly to the outer surface. In some species it is further modified by the character of the egg-cell which passes through it; while in mammalia, the developing embryo attaches itself to the well-nourished walls of the duct, as being the very best feeding ground which it could possibly find, and this point of attachment becomes developed into a womb.

It should be noted here that the primary function of all germ ducts and all their parts is to allow the passage of germ units to the outer surface of the parent colony, and thus the primary function of the womb part is *not* to feed developing embryos as the old theorists maintained. Among higher animals where a distinct fertilizing association has been developed, the anabolic duct has been further modified through such association, especially the trunk part and around the external orifice.

On the male side the ducts leading from the katabolic glands remain poorly nourished, narrow, kinetically drawn out to extreme lengths, [32]

forming into coils and bunches of coils before reaching the outer surface. In the higher organisms the two ducts leading from the two glands become united into one trunk and this also unites with the urethra.

Primarily a germ duct extends no farther than the outer surface of the colony body, and with that its basic function of a duct is expressed. But with the gradual development of a fertilizing association between two mature units of the higher aquatic animals and land animals, the katabolic duct becomes greatly modified, even more so than the modifications of the anabolic duct through such association.

The development of this fertilizing contact association will be fully considered in Chapter V. It is during such association that there is an impulse developed to press the orifices of the ducts together, as the greater metabolic activity is taking place at those points; and this results in a tendency for the smaller katabolic duct to penetrate into the fuller anabolic duct, thus drawing it out beyond the body surface and surrounding this part with spongy erectile tissue.

These facts of comparative anatomy and physiology make it clearly evident that only the germ glands and the simple germ ducts are all that could possibly be considered essential parts of propagation, and even as such they are only secondary factors of this process. It is also evident that the great modification of the simple germ ducts into the distinct male and female sex organs has not been caused by a "reproductive necessity" or as an elementary part of propagation; but, aside from their primary function of ducts, their most essential modification has been caused by the development of a fertilizing contact association among higher animals, and they are therefore purely love organs and not "reproductive organs."

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CHAPTER IV.

SEX CHARACTERS.



HE continuous alteration of environments exerts a basic influence upon the metabolic process of life. A non-stim-

ulating temperature and abundant food supply will always tend to carry the living process toward an extremely well-nourished anabolic direction. In contrast a high stimulating temperature and a low food supply will always tend to carry the process toward an extremely active katabolic direction.

Such changing influences are continually exerted upon every living being. In fact, the very seasons are divided into cold katabolic and warm anabolic periods, and the earth is divided into male and female zones, so that none can escape the influence of these sex laws.

At first the effect of these influences is only temporary and susceptible to be reversed, but if one or the other class is continued for a sufficient length of time their effect must become hereditary, and then exert an inner hereditary influence upon the living process.

The least differentiated organism, as well as the least differentiated parts of an organism are the first to be affected; and thus the simple unicelled beings are easily and rapidly divided into the male and female classes, and in colony organization the least differentiated germ tissues are the first to be divided into the hereditary katabolic and anabolic germ glands.

With the hereditary development of the germ glands and germ ducts as sex organs, which was fully described in the last chapter, they are both transmitted to every successive offspring and under ordinary conditions they should both be fully developed in every one of those offspring. While this bi-sexual development is the general rule among the lower orders, yet among the higher forms of life there is a decided tendency [36]

toward uni-sex development; and it is this fact which we must now consider.

In accordance with the old theory of the elementary nature of sex it was but natural to assume that normally each unit should develop into either a male or female, and that bi-sexuality was abnormal or a special created condition. scientific facts, however, clearly demonstrate that the natural law is just the reverse of this assumption, and that the primary state is bisexual and that uni-sex is a higher and secondary developed condition. Even in all so-called males the female organs and characters are always partially developed, and in all uni-sexed females the male organs and characters are also more or less developed. When these are once incorporated within the specie heredity they are all transmitted to every offspring, as there can be no dividing sex-wall within the nuclear structure through which the hereditary power is conserved and transmitted.

Through the law of heredity all characters acquired by a species, whether so-called male or female characters, form a potential part of the

heredity nucleus which is passed on from one unit into another at every cell-division. This important scientific fact should be carefully considered by those who claim that woman inherited special characteristics which are not transmitted to the male. All characters are racial (species) and not male or female.

Our full specie-characters being thus transmitted and so inherited by each one of us, it is evident that their subsequent development, either fully or partially, is purely the result of external causes or surrounding conditions—extra-hereditary; and so our being either a male or female is not a direct hereditary result.

What are these causes and conditions?

Where the colony organization is simple and of such a character that both classes of germ glands and germ ducts, as sex organs, can develop in different somatic regions of the body, they will both be fully developed. As already stated, in simple loose colonies such as sponges there are an indefinite number of both classes of glands and ducts developed in different parts. In the bi-sexual earthworm the female glands [38]

are developed in the thirteenth somite, the duct passing out in the fourteenth, while the male glands are formed between the tenth and twelfth somite.

But when the organization becomes more complexly differentiated, or rather each part of the colony becomes more interdependent upon every other specialized part, different conditions of developing the specialized parts of the colony are brought about. Every differentiated part of an organization must be in harmony with every other part as well as with the whole. The specialized germ glands can develop within only one of the primary, undifferentiated somatic parts of the organism, so that with the increased complexity and specialization of the different parts the development of these glands is restricted to the single abdominal cavity where the least differentiation has taken place. This fact causes an anatomical restriction for both classes of glands and ducts to fully develop in the same part of the body, especially where the ducts have developed into very complex sex-organs. restriction and anatomical interference of one

with the other is clearly seen in the imperfect development of both organs in hermaphroditism.

This is the anatomical cause which tends toward uni-sexuality; but far more important is the physiological cause.

Anabolic and katabolic tendencies are in a certain sense antagonistic toward each other, as they are completely opposite metabolic expressions. Now, where both classes of glands are forced to develop within the identical same region of the organism, the influence of one would have a tendency to overcome the hereditary power of the other, forcing it to remain dormant or partially dormant within that individual. This influence in determining the sex would be greatly assisted by the anabolic or katabolic conditions which surround the developing embryo during an early period.

The determination which causes the potential hereditary power of one to develop and forces the other to remain dormant is governed by the same law which causes one color to develop in the skin and hair, and forces another inherited color to remain dormant during one, two or more [40]

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generations; or which acts in the same manner with any other characters. Both the anabolic and katabolic hereditary powers of the glands and ducts being in an active state, the influence which determines one or the other to develop must be largely caused by the anabolic or katabolic conditions surrounding the stem-cell and embryo. But whatever may be the influence, it is absolute in its determination as to time and condition, as both classes of glands may, and often do, develop side by side, so that those persons who claim to have discovered the cause of determining sex are not yet able to demonstrate their claim as a scientific fact.

However, from the known facts of sex development, it is reasonable to conclude that anabolic conditions within both parents during germ formation and within the mother during the early period of embryo formation will "produce females"; and in contrast, katabolic conditions at such periods will have a tendency to "produce males"; but in all cases it is only a tendency and no absolute certainty.

The character of the developing germ glands

and germ ducts once being determined within the embryo, their anabolic or katabolic nature will then exert a reflex influence upon the whole organism, modifying the general specie-characters in an anabolic and katabolic manner and thereby developing what are called "secondary sex characters."

On the one side the katabolic male glands exert a strong kinetic influence upon the whole organism, increasing metabolic activity, cell-division, and thus forcing an increase of organic construction. Especially at and after the period of maturity, the active katabolic glands impart a renewed impulse of metabolic activity with each recurring crisis, thus promoting organic construction in every part of the organism, and tending to develop the potential hereditary power of the species to its highest and fullest degree.

From this fact it is seen that the male only expresses the fuller development of the species heredity; and that the "male characters," aside from the germ glands and germ ducts, are no more specific male characters than they are female, but they are purely general characters of [42]

the species. This fuller development of the specie-characters within the male does not imply, however, that he is the more perfect of the two.

In biology the more perfect organism is considered to be one which possesses the greatest power to adjust itself to its environments, no matter what form, size or complexity it may have. Extreme katabolism leads to exhaustion, death and extermination, just as extreme anabolism will; and in setting up an ideal standard of measurement we must remember that it is a fertilized equilibrium toward which all living units are struggling.

On the other side, in contrast to the male development, the reflex influence of the anabolic glands causes a lower rate of metabolic activity, cell-division and organic construction. This contrast is specially noticeable at and after the period of maturity. Up to this point organic construction has been carried on at about the same rate as in the corresponding male; and under normal conditions and among natural animals there is no very distinct difference between an immature male and female, aside from

the sex organs. However, through forms of dress, play and training, • civilized society has succeeded in developing a more distinct difference between a boy and girl, to the great injury of both; but this artificial difference is not found among the savages and barbarians who live a more natural life.

With the special activity of the germ glands at maturity the metabolism of the entire organism is increased the same as in the corresponding male, but the checking anabolic influence does not allow it to be carried up to such a high degree of development. Therefore, there is not the same amount of organic construction, and the potential hereditary power of the species is not as fully developed as in the male. The direct effect of germ activity, together with a better food supply, causes a fuller organic development of the pelvic region, but from this point the development is checked through a lower degree of metabolic activity than in the male.

In this manner all the so-called secondary female characters have been developed; or rather these characters are only anabolic expressions of [44]

the general specie-characters, and are therefore no more female than they are male. The laws of heredity are not divided into two parts, one part automatically transferred into one individual and at another time the other part transferred into another individual.

Thus the female represents only a checking in the katabolic storm, a calming, conserving haven, toward which to fly when the lightning flashes and the elements howl in their madness; and it is out of this soothing anabolic mother nature that all the humanizing and civilizing acts in the world have been developed, as we shall see in another chapter.

CHAPTER V.

FERTILIZATION.

HEN used in relation to the process of propagation, the term fertilization is commonly interpreted to mean a crea-

tive, (re-)producing act, resulting from an altruistic impulse and union of "male and female reproductive elements." The term is also used in a sense to make fruitful and enrich the soil, etc.; but when we speak of the egg or flower being fertilized, it is in a sense of a creative or productive nature, which has resulted from a species-maintaining impulse which is supposed to be a primary impulse of every living being.

That such is the common interpretation of fecundation or a fertilizing act is further evidenced by the fact that practically our whole social structure and code of ethics is based upon [46]

the theory that there is a basic elementary impulse within every living being to reproduce itself—for a purpose.

In Chapters I and II it was stated that the basic principle of all propagation was a process of cell-division—and that this process could not imply an altruistic act or primary impulse of the ego unit to reproduce itself—for a purpose or otherwise. The primary ego struggle of that unit, its normal growth and healthful life expressions, simply result in the splitting apart of that ego-center-or cell-division-regardless of the results as to the production of new egounits. In multicellular colonies, such as our own bodies, this propagating process of cell-division expresses itself in the same manner. The stemcell out of which we have developed, matures and divides; these two again mature and divide, continuing thus until our whole body has reached a certain mature completeness (puberty), and the colony organization being full, through the continuous expression of this maturing, dividing. propagating process, some of the new units will become separated from the rest and make their

escape from the parent as germ units. Thus the development of the flower or the egg or the sperm is but an expression and differentiation of the same life principle which causes the vegetative development of the plant or animal body; and does not imply the introduction of a new life principle which has for its purpose the altruistic production of new ego units, or the perpetuation of specie-forms.

This being now a clearly established scientific fact, it becomes necessary that we give an entirely new interpretation to the act of fertilization and see what great life principle underlies this impulse, which has developed into the higher psychic sex love and exerted such a relentless guiding influence over the whole earth, and which is destined to carry humanity to a higher level or dash whole races down to the abyss of extermination.

The reader's attention has already been directed to the experimental results of artificial fertilization, and that these clearly demonstrate that the result of a fertilizing union has only a catalytic, reviving, restoring effect upon a bio-[48]

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chemical or living process. The egg is restored to a growing fertilized equilibrium through the catalytic effect of a special salt solution in which it is placed, while the sperm is restored by allowing it to penetrate into simple protoplasm from which the hereditary nucleus has been removed.

Such being the cause and the result of fertilization, the impulse thereto must be an effort of an ego living process, which exists, and which has moved away from the normal, to be restored back to a growing equilibrium. It is true that the factors here involved in both the result and impulse are purely nutritive or metabolic, and certain degrees of restoration are always accomplished by the proper amount and kind of food matter and proper surrounding conditions, so that it does not seem possible that such a strong fertilizing impulse as is found among germ units and the higher land animals could have developed out of such factors.

In the study of fertilization it is, however, essential to remember that the metabolic process of life is not a crude process of combustion like

that of a fire. Living substance is composed of very complex compounds (proteids), and the process is carried on by the catalytic action and reaction of these upon each other. A catalyzer acts from a distance without forming a direct chemical union with the substances acted upon, so that the substance of these compounds moves along with a series of bio-explosions within the plasmic whirlpool, until such combinations are formed which must be forced out as waste matter.

The complex substance then differentiates into the different kinds found in different plants, and in the different animals, and in the different parts of a plant and animal body. Each of this specialized kind requires special food, or special catalytic effects of specialized catalyzers with which to maintain a healthy normal living process.

Where this specialization has not been carried beyond the restoring influence of the surrounding medium and character of food matter, the struggling ego is able to maintain a fairly normal fertilized life; but where this is carried way [50]

beyond such limits as an extreme anabolic or katabolic tendency is liable to produce, a normal equilibrium of a living process cannot be maintained without the effect of specialized catalytic action.

The extreme anabolic and katabolic protozoas, as well as the sexed germ units, have been carried beyond this restoring, life-saving influence of their environment; but they have become so specialized in opposite directions that they act as the most effective fertilizing catalyzers upon each other. The primary impulse which draws them together is merely the result of their ego struggle for existence and aided by the accidental currents of the fluid medium, or the currents of air or the feet of insects, two such units are brought within the sphere of each other's metabolic influence. Then the impulse of contact and a union is a hungry one on the part of the katabolic unit, and a reviving, stimulating one on the part of the anabolic unit. Both of these are metabolic impulses.

As a result of this impulse and action, of two germ units, living substance is assimilated directly into living substance, each having a direct catalytic effect upon the other and forming an entirely new combination of plasmic compounds, and thus restoring the living process, within the newly formed stem-cell back to its primary, youthful, fertilized condition.

Purely a life-SAVING act, and not a life-CREATING act.

Haeckel says that in its ultimate analysis heredity will be found to be nothing more than memory impressions. And thus through this law of heredity, the realization of being carried away from a normal living process and the realization of having this restored to a fertilized equilibrium through the association or assimilated union of two units, it gradually becomes impressed upon the plasmic brain function of those units and is then transmitted to succeeding generations, and thus becomes an hereditary impulse. But no matter how strong this hereditary impulse may be, neither the uni-celled protozoa or germ units can ever succeed in forming a fertilizing union unless they are accidentally brought within their attractive sphere by some outside power at the

proper time. Otherwise they are simply doomed to an immature dissolution and no criminal laws of homicide can ever change this biological fact.

The developed impulse toward a fertilizing union does not always result in a complete assimilation of two units into one. In some unicelled species there is merely a prolonged contact association, resulting in an interchange of the divided nuclear substance; while in other species there is only a prolonged contact association with no transmission of substance from one into the other. But in both such forms of fertilization there is as complete and effective a fertilizing result obtained as though there were a complete assimilation of the two into one.

The two associating units are specific catalyzers toward each other, so that their mere presence and contact effects the bio-chemical process within each without necessarily forming a direct chemical union; and thus through their prolonged contact association, both their life processes are revived, accelerated and restored to a fertilized equilibrium.

It is through this fundamental life principle,

based upon catalytic action, that the impulse toward a contact fertilizing association between two mature multicellular units has been developed. For we find that, aside from this fertilizing impulse developed among uni-celled beings and germ units, such an impulse is expressed only among the higher animals, and not found among plants or the lower metazoa beings; so that this great phenomenon of sex-love must have have been gradually and slowly developed through the empirical hereditary knowledge gained by the individuals.

In the entire plant world the mature germ units escape into the surrounding medium, with no impulse or act of association on the part of the parent units. Among the lower aquatic animals this same condition is found, so that our own aquatic ancestors must have expressed their propagating process in the same manner, without possessing any complex "reproductive organs" beyond the simple germ glands and germ ducts leading to the outer surface, and no knowledge or impulse of sex-love.

As already stated, the fertilized living process which results from the union of two germ units [54]

is maintained in a fair equilibrium through vegetative growth and metabolic activity among the simple colonial forms; but with the increased differentiation and complexity of organization, and especially with the increased anabolic and katabolic tendencies it becomes more difficult to do this among the higher metazoas. The effort to maintain this equilibrium is expressed in vital activity, such as work and the playful gambols of animals.

It is this playful impulse of association which serves as the training school out of which the historical species of sex-love, as well as the ontogenetic individual sex-love, has been developed.

During the playful gambols of the lower animals they come into frequent contact association with each other. And during such contact some will produce a specific catalytic effect upon certain others, causing a distinct fertilizing sensation within each one. The effect of this sensation being beneficial and pleasurable, the effort is then made to repeat and prolong the contact. In this manner those simple units receive their first experimental lessons in a fertilizing association; and through long historical experiences

these lessons are gradually impressed upon their hereditary mind and are thus transmitted to succeeding generations.

A high degree of fertilized life corresponds with a mature growing crisis of the colony, and also the production of germ units; but otherwise the two phenomena have no elementary relation to each other. Now, as the hereditary, as well as the individual knowledge of a catalytic fertilizing effect increases, an effort is made during this preliminary playful association to press the orifices of the germ ducts together, as the greatest metabolic activity is taking place in that part of the colony. The high degree of fertilization caused by a more or less prolonged association tends to the formation of germ units and with the complete contact of the two ducts there is a tendency for the katabolic units to escape into the anabolic duct instead of into the surrounding medium. In this manner proper conditions are brought about through which the oviparous animals and mammalia can develop: and it is also during such association that the katabolic duct becomes extended beyond the body surface and is developed into a copulating organ.

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CHAPTER VI.

THE HISTORICAL DEVELOPMENT OF SEX-LOVE.

HE passing theory, about the elementary nature of sex, did not admit such a phenomenon as the historical development

of sex-love, but assumed that sex and sex attraction was an elementary creative principle of life.

In the beginning male and female were created to replenish the earth and reproduce themselves—to reproduce their kind was the anthropomorphic command. In our speculative philosophies, ethical and religious codes there is as much, if not more, emphasis placed upon specie maintenance as upon the individual life and ego struggle for existence.

The genus homo has developed such an ex-

alted super-cosmic opinion of itself that the only way in which it could maintain its spiritualistic pedestal was to declare the species an unalterable product of a creative power with man placed far above all other "brutish" creatures. "Universal kinship" is difficult to comprehend where the ego has bloated itself up to such an abnormal height.

Empirical facts which can be seen, tested and demonstrated are doing a wonderful amount of work in destroying the premise of some of the old theories.

The ontogenetic facts of embryology, about which there can be no shadow of doubt in any rational mind, has supplied us with the "missing link" which binds all living units into one common bond of relationship.

The empirical facts of fertilization have demonstrated in just as clear a manner that the old theory about the elementary reproductive nature of sex was based upon an erroneous conception of the entire process of propagation; and that sex attraction and psychic sex-love have been developed out of different complex life forces and life expressions, and are therefore not of an [58]

elementary nature. The facts of artificial fertilization do not imply a speculative theory about the nature of matter or force or the electron of the ultimate cause, but they merely demonstrate that in the process of fertilization there are no other forces or principles involved than any other metabolic action or chemical action of a catalytic nature.

As already stated in the preceding chapters, the act of fertilization or fecundation is caused by the catalytic effort of one form of substance acting upon another form, and thereby reviving or rejuvenating a bio-chemical process, but not creating such a process or reproducing a new life. The action is life-saving, beneficial and satisfying to the ego; therefore the impulse thereto must be purely an ego impulse to gain (regain) an equilibrium of its metabolic life process.

The multicellular animal histons express this impulse through their kinetic activity, gambols and playful associations. This playful impulse is fundamental and universal among all animals from the lowest to the highest; and it is during such associations that both the histon and the

individual learn through their experiences that a contact association of two oppositely developed metabolic units has a catalytic effect upon their lives.

The accumulated hereditary knowledge will, of course, greatly increase the impulse toward such association within the individuals of the higher species, yet each individual must pass through the experimental stages of a beginner toward the higher knowledge of such association, just as the historical species have passed through these same stages. In other words, that complex phenomenon we call psychic sex-love must develop within species as well as the individual from the kindergarten stage to that of the master, and is not an impulse "planted within us from the beginning."

Among the lower aquatic animals there is no distinct expression of sex-love between any two multicellular units. At the approach of a mature growing crisis there is an increased metabolic activity to be seen, more or less playful associations, and then the ripe germ units are allowed to escape into the surrounding medium.

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Only as we reach some of the higher aquatic forms has the experimental knowledge of the species been sufficient to cause a distinct hereditary impulse toward a closer contact association.

In some species of fish we can see the male and female swimming playfully up the stream into shallow water. And during such association an effort is made by both to press the orifices of the germ ducts together, as the greatest metabolic activity and fertilization takes place at those points.

Such a simple association is practically the first distinct stage in the higher development of sex-love.

As the histon gains in the knowledge that the closer contact association is highly beneficial to its metabolic life, the impulse thereto becomes stronger; and with every advanced stage the individuals as well as the phyletic-branches become more and more dependent upon its proper expression and fertilizing influence in their struggle for existence.

The rejuvenating beneficial effect gained by the contact also induces the two units to prolong

the association until there is a certain degree of complete fertilization reached. The time required to obtain such a satisfying degree of fertilization appears to vary with the advance of phylo-organization.

Among the higher aquatic animals the whole impulse is expressed in metabolic play and very simple short contacts. Among annileds and most insects, after a period of preliminary sex play, a complete contact is formed which is prolonged for twenty, thirty or more minutes.

This prolongation and completeness of fertilization is, however, dependent upon the anatomical structure which the specie has acquired, as the conditions to prolongation require that there be no muscular straining in any part of the body. Where the anatomical structure of the species is such as to require great muscular tension to form the complete contact, this tension will produce a muscular crisis, followed by relaxation and a necessary separation.

In the common bi-sexual earthworm a complete contact of bodies and germ ducts is formed, as the two lie side by side without any straining [62]

of the body muscles, so that there is no crisis, muscular or otherwise, but the two separate only when there is a realization of a complete fertilization in both.

This form can be considered the primary form of a fertilizing contact association, as well as the most perfect and ideal.

In birds and most reptiles the acquired anatomy is such that the ventral surface must be placed over the dorsal, necessitating a downward and upward turning movement of the bodies. This requires a severe muscular strain and thus produces a crisis and the necessary relaxation. In such cases the brief contact is repeated at varying intervals until a certain degree of fertilization is obtained.

Among quadrupeds the ventral surface must also be placed over the dorsal, necessitating more or less muscular tension with the accompanying crisis and relaxation; and in addition, the katabolic germ duct is drawn out for a considerable distance beyond the body surface in order to make a complete contact.

Fertilization being a life-saving and rejuvenat-

ing process, it is evident that those species whose anatomical structure will permit the fullest prolonged contact association, thereby allowing the individual units to obtain the highest degree of fertilization, will obtain the greatest advantage out of this process in their evolutionary struggle for supremacy.

A catalytic fertilizing effect is obtained through contact of the most sensitive ventral surfaces of the body as well as the erotic germ ducts.

Only in the order of primates are the proper anatomical conditions obtained for such an association and for the highest development of psychic sex-love.

The mode of life and erect posture found in this order cause such a modification of the pelvic parts of the vertebrate structure, that the posterior limbs can be brought into a vertical line with the body, thus permitting a complete contact to be made of the germ ducts without any severe muscular tension with its resulting crisis and relaxation.

The phylo-branch homo, developed out of the [64]

order of primates, has gained the greatest speciebenefits through its anatomical advantage in forming the more perfect contact association and thereby obtaining the highest degree of a plastic fertilized life. Or rather we should say that it was this mighty complex force called sex-love, which expresses itself in different degrees in different species of animals, that found its most advantageous form of expression through the special anatomy of the branch homo on the great Life Tree, and was therefore the most vital factor in driving this species so far, far in advance of all other animal branches.

Biologically as well as historically considered, there can be no doubt that it was this power of continually gaining the highest degree of a rejuvenating fertilized life which was the most fundamental force in developing the human branch up to its present stage; and reasoning from analogy, we are certainly justified in predicting that it will be this same force of sexlove, properly expressed, which will lift this same branch far above any ideal which we could possibly imagine at this time.

All through the pages of history we see where the ancient world had bright glimpses of the mighty rejuvenating and molding power contained in a proper fertilizing association; and whenever this fertilizing impulse was allowed a normal expression without any artificial interference it tended to lift that race or tribe far above all the rest. The ancient Greeks are the most convincing illustration of this fact.

Just now some races, and especially some of the so-called civilized races, are passing through a period of reaction and repression, but even out of such periods the racial knowledge gained must ultimately act for the good of all. We can just see the clear rays of a powerful light breaking over the whole world on this subject; and we have only to state the case fairly and every intelligent mind instantly sees that the policy of ignorance and repression has been carried too far. From all quarters the cry is going up for more light on the sex question.

Happily, science has come to our rescue to silence all speculative theorists on this subject and given us exact knowledge of just what fac[66]

tors are involved in sex. We know that sex itself is only an expression of the nutritive metabolic life principle, and that fertilization out of which sex-love has developed is only a life-saving, rejuvenating process. The elopment of extreme maleness and femaleness tends to carry the living process away from an equalized plastic center; and thus the primary impulse of sex-love is only an impulse of the ego to regain this center and maintain a higher degree of a fertilized molding life process. Where this fertilizing life force has become an important factor in the evolution and development of any species, as it has in the higher animals and especially the human race, its continued proper expression is certainly of the greatest importance if any further progress is to be made.

While the molding plastic influence of sexlove is an important factor in evolving the higher organism, yet its improper expression becomes just as potent in destroying that organism. A reviving, healing, rejuvenating, equalizing force like the fertilizing process cannot be lightly brushed aside and forced into artificial channels without exacting a terrible price from the violator.

The artificial viciousness, criminality and insanity is the reward which the civilized races are reaping for their unnatural sex ethics and perverted sex-love. When the racial consciousness once becomes thoroughly impressed with this scientific fact that sex-love is purely a plastic rejuvenating life-saving impulse, then there will be such a revulsion against our present sex ethics that they will be swept from the face of the earth and we will return and live in closer harmony with nature's sex laws, enabling us to develop the very highest ideal type of human beings.

CHAPTER VII.

PARENTAL CARE AND THE HOME.

N THE preceding chapters it has been repeatedly stated that the old creation theory assumed that there must be an altruistic impulse within every living unit to "reproduce" itself and become a parent—for a purpose—namely, to perpetuate its special type of organization. This was supposed to be the cause and the primary impulse of a parent, as well as the cause out of which a parent's care for offspring has been developed.

Such an assumption would be perfectly sound if specie-organizations were elementary in their nature; but the facts of evolution make it clearly evident that such organizations are only modifications of each other, resulting from an inner ego struggle of adjustment to the ever-changing

environments. Now, if species are not staple and elementary in their nature, why should there be a primary parental impulse within a living unit to perpetuate a form which is being continually changed and modified?

On the other side, an ego impulse, which is universal and fundamental within every living unit, cannot be blended or associated with any other primary impulse of an opposite nature, but must be purely one of SELF-PERPETUATION.

As is so clearly expressed everywhere, all the laws of nature are centered and concentrated toward the individual, toward the ego unit and toward its own perpetuation, well-being and happiness. To live and to express metabolic activity is the primary and continuous impulse of every living unit—that is, normal units.

But to live and express metabolic action results in the splitting apart of each living unit into two or more new units. For normal metabolic action cannot take place within living substance without an increase of that substance; and as the limit of the organized capacity is once reached [70]

there must be a division of that overflowing center.

Thus the very act of living IS AN ACT OF PROPAGATION and perpetuation of new living units—not an altruistic act, but an egoistic act.

This being true, where then can we find the cause out of which a parent's care for offspring has developed?

In the division of the uni-celled protophyta or protozoa there certainly can be no parental care implied or expressed. This is also true of loose colonies, where the new units are formed through this same process of cell-division and then make their escape into the surrounding medium. In nearly all the higher aquatic animals and plants these same conditions are found. Everywhere new units are formed by cell-division, and then make their escape into the surrounding medium, there to struggle for existence unaided by a parent's care.

Even in the higher animals, including man, new units are primarily formed and escape from the parent colony without an elementary impulse

of the parent to form them or to care for them.

The fact of sex and the strong fertilizing attraction developed through it does not make this attraction an elementary impulse of a parent to reproduce itself, as there are thousands and thousands of cases where the new units develop parthenogenetically—that is, without the union of two sexed units.

Parental care implies some assistance given, either voluntarily or involuntarily, by a parent organism to a new unit. The first evidence of such assistance found in biology is where the new unit receives a sufficient amount of germ food within itself to enable its organization to develop to a point where it has the capacity to obtain its food from without.

Each offspring of a normal protozoa has sufficient vital substance within itself to exist without any special aid from a parent. But let some of these develop an extreme kinetic maleness, such conditions are completely changed.

Before there has been a great amount of sex differentiation, all colony germ units have a sufficient amount of germ food within themselves to [72]

enable them to reach a point of development where they can obtain it out of the surrounding medium. However, as the complexity of colony organization increases, more and more of this germ food is required to permit a development to such a stage.

Now, with the increased sex differentiation, the development of extreme maleness robs one class of germ units of this necessary germ food, and thus curtails their power of cell-division and colony organization. And only such germ units, from the lowest to the highest, as contain a sufficient amount of vital food substance are enabled to develop as mature offspring; and this sufficiency of germ food—the first parental aid—is allowed to accumulate only through the conserving anabolic femaleness developed within life.

Thus, parental care has its primary source within the *mother* nature of the living process, and not within the supposed impulse of a parent organism to perpetuate its species. If there was an elementary impulse within every organism to become a parent and care for offspring, this

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would have to be expressed within every male, the same as it is within the female. This, however, we know is not a fact.

Maleness is destructive of a utilizing nature, using up all its energy in an extremely active ego life. While on the other side, femaleness is constructive and conserving; and thus allows the accumulation of the necessary germ food and forms the true source out of which a parent's care for offspring or fellow-beings has been developed.

Not only do the facts of biology demonstrate that this is the primary cause of parental care, but they also teach us that it is out of and through this conserving mother nature that all the humanizing and civilizing acts of the world have been developed.

It is this anabolic mother nature which conserves all the food within the roots and fruits of plants, within the egg-shell and mammary glands, to serve as a perpetual supply for those who are hungry and those who are in need. And thus it is the mother who is not only the [74]

primary but the greatest provider for offspring as well as fellow-beings.

And it is the normal anabolic mother who is the first to extend a helping hand; she is the first to bandage the wound, to relieve suffering and bring cheer, comfort and peace into a struggling kinetic world.

In addition to this primary cause, the parental care as developed among the higher animals and man contains other factors which are largely of a social nature; such as the strong impulse to aid and protect social units of the horde or group. This impulse becomes strongest to aid those who are the most intimate in their associating relation, such as their own offspring which have been cared for and reared by parents.

The male of animals cares nothing for its offspring until it is sufficiently developed to become a unit of its social group, and then it will give it protection, but only as an associating unit. Even the strong mother impulse to care for offspring is lost, as soon as those offspring are sufficiently developed to take their places as units within the horde. The higher developed parental care as found among human races is largely the result of this ego impulse to care for associating units, especially those who are closely related in their association. But space will not permit a more detailed discussion of these factors; it is only important to keep in mind, when studying the problems involved in our subject, that it is out of the conserving anabolic femaleness that a parent's care for offspring has been developed, and that this scientific fact completely destroys the old theory that there is an elementary reproductive impulse within every living being.

To better express this conserving mother nature, the *mother* selects the place and builds the nest—the home.

Within still shallow waters, or the sands of the shore, or under some protecting leafy bough, the mother selects the place and prepares the nest—home. The normal anabolic mother always seeks to get away from all storms, away from the destructive fury of the kinetic elements; and within calm waters or a hidden nook she seeks [76]

to hide the eggs and protect the helpless brood with her outstretched mother wings.

There in that peaceful, soothing nest-home is developed the true mother art of humanizing and civilizing the world.

This, however, is not the home established upon the principle of "personal property rights" or upon an "estate." This is not the home established with the proceeds wrung from crushed and helpless fellow-beings, for the purpose of displaying the vanity of a bloated ego, or for the purpose of developing that mad social kineticism which is destroying the very heart-core of civilization.

No, mother's nest-home was established without any priestly sanction, as a peaceful retreat, a calming, soothing haven to which the individual may retire for rest and renewed strength after his struggles with a kinetic world. Discord, strife and inharmony have no place in this home, and institutional conventionality with all its divorce laws can never force them into a natural nest-home. And it is nevertheless the mother's home if it is only a depression in the shore sands

or hidden under some protecting shrub or is but a humble cottage or marble palace, if it only represents a gentle soothing anabolic femaleness, then only is it home, sweet, peaceful home.

To this cradle of altruism and civilization the katabolic male, inspired with a strong ego-fertilizing impulse, will follow like a captive slave; and there he must learn the lesson of what it means to care for offspring and care for fellow-beings.

The impulse of self-fertilization draws the male under the influence of this nest-home, and there, to please his fertilizing mate, he gradually learns to care for offspring. And gradually through long ages of historical experiences of association and heredity there is a greater impulse to care for offspring or associating units developed within the male.

The more of the mother nature is developed within the male through association and heredity, the greater will be his impulse to care for off-spring; but at best this can never be as fundamental and enduring as that of the mother.

As already stated, aside from the primary [78]

mother impulse to care for offspring, the greater part of parental care as we see it expressed among civilized races has been developed out of purely social factors. After the mother's impulse to care for helplessness has been expressed, the whole effort of the parents is to prepare the offspring so that it will become a fit unit in the great social whole.

This being a basic principle of parental care, it is evident that society as a whole has a far more vital interest and obligation to care for the development of its future units than have the parents, the primary mother's care, of course, excepted. At the present day there is a strong social realization of this fact devloping; and society is making more and more of an effort to care for its developing units in order to preserve itself.

When this fact once becomes thoroughly impressed into our social consciousness, and there is a proper social effort made to care for those offspring who are *here*, allowing no mother or child to suffer want or be ground to pieces in the relentless jaws of commercialism, we need

never fear a "race suicide." Even if our own family tree becomes exterminated, the world's mothers will always provide a sufficient quantity as well as quality, if there is a proper amount of room and sunshine within which they can grow and develop.

CHAPTER VIII. CONCLUDING.



VERY problem contains a master-key, which, if discovered and correctly applied, will solve its mysteries.

A vast amount of labor has been expended in trying to solve the so-called sex problems; but all were in a chaotic condition until the keystone of their arch was revealed to us through scientific investigation. This master-key was found in the fact of artificial fertilization, or, to state it in other terms, in the fact that scientific experiments have demonstrated that the process of fertilization is only a reviving, rejuvenating process and not a creative or reproductive process.

It has long ago been recognized by earnest students of this subject that there was a more fundamental life principle involved in the phe-

nomenon of sex than a mere reproductive one. Some of the ancients, who were masters in a certain sense in penetrating into the mysteries of nature, were convinced that there was a mighty power within the proper sex expression which exerted a basic influence upon the individual life and well-being, regardless of its supposed reproductive nature. From time to time unprejudiced minds who were not afraid of the conventional taboo placed upon this subject tried to teach humanity that there was a great potent power within a proper sex expression which exerted an elementary influence upon the individual health, vital force and longevity.

A great deal of good has been accomplished along this line, but with the artificial prejudice and misrepresentation of nature's laws, no substantial progress could be made until the nature of sex and process of propagation was understood.

In the study of this subject, and to give a correct interpretation to the facts, the old idea of the creative or reproductive nature of sex must be entirely eliminated from the mind. While sex [82]

as a factor has exerted a great influence in the propagation of the higher organism—and it can be stated as a positive fact that the higher organisms could not have been developed and could not be propagated without sex as a factor in the process—yet this does not change the fact that sex is something entirely different from a reproductive force, and has no elementary relation to the process of propagation.

A secondary factor may become a very important factor in a complex process, yet it would always remain secondary and could never become a primary factor.

That the entire phenomenon of sex is but a secondary factor in the process of propagation, and therefore expresses a different life principle from a reproductive one, is evidenced by several facts.

First—Living units are propagated by a process of cleavage or cell-division, and this is true from the lowest primary form to the highest and most complex form.

Second—In their primary nature every one of these new units contains the complete potential

hereditary power to develop into mature units under proper conditions. This principle applies to all germ units, either male or female, whether considered in their phylo development or their historical formation within the individual.

Third—Not until there is considerable sex differentiation does fertilization become a factor in assisting the propagating process. Cell-division or propagation must take place with the maturing of the first organized unit, while complete sex differentiation does not occur until a much later historical period, so that, whatever part sex has in propagation must be of a secondary nature.

Fourth—It is further evidenced by the nature and development of both the so-called essential and secondary sex characters. The foundation of the sex organs, the primary germ glands and simple germ ducts are an expression of the function or impulse and power of cell-division, but their modification and development into copulating organs is purely the result of an ego-fertilizing impulse and not a reproductive [84]

impulse. Thus, also, the "secondary sex characters" are only modifications of the general specie-characters, produced by the checking anabolic nature of femaleness.

Only by separating the phenomenon of sex and the process of propagation into their elementary factors are we enabled to understand their true nature; and this also teaches us that there is a far deeper meaning involved in sex, sex attraction and fertilization than the mere formation of new living units and perpetuation of species.

The first impulse of sex attraction and the primary result of fertilization is a reviving, rejuvenating one, upon the living process of a unit which EXISTS, which HAS BEEN PROPAGATED, and not to produce a new unit.

The ever-changing environmental forces within which a living process must exist have a constant tendency to reduce or destroy that process, so that the organized ego must continually battle against these forces and seek to gain every advantage with which to maintain its metabolic life. One of the most advantageous forces gained for

this purpose is through the catalytic or fertilizing action of two oppositely developed metabolic units coming in contact with each other, or being fused into each other, and thereby having the life process restored to a more youthful plastic condition.

Fertilization is the greatest power in the world which can revive, equalize and rejuvenate a declining metabolic process of life.

Only such forms of organization which can gain the greatest benefit out of this fertilizing power will gain the greatest advantage in their struggle for existence and must therefore forge far ahead of all other forms. All the historical forms of life have struggled to receive the greatest benefit out of this fertilizing power, but through the advantage or disadvantage of organization, some were enabled to receive greater benefits than others.

As stated in Chapter VI, there can be no doubt that it was mainly through the advantage of anatomical structure which enabled the branch homo to receive the greatest benefits out of the fertilizing power of sex-love, and thereby enabled [86] it to outstrip all others in the race for supremacy.

One species of life is no more sacred than other species, and it is no more a "necessity of nature" that one form of organization should be perpetuated in preference to another form. But only such species can and will survive where the individual life is maintained with a high degree of plastic vital force, and with a normal healthful equalized metabolic life process, whether within a simple or complex unit.

Sex-love is an evolving force which has developed within the historical species, therefore it is expressed in different degrees, from the simple to the highly complex, within different species. The cooing dove is a greater lover and receives greater advantages out of its fertilizing love power than does the earthworm or other annelids. And according to this same law, some types and races of man have a higher developed love expression and receive greater benefits out of their fertilizing life of love than do others.

Each individual in its life history repeats, in a comparatively brief period of time, the racial or specie-history to which it belongs; and as the [

different complexities of organization and different functionings are evolved within the individual, from the simple embryonic state to that of maturity, so must the principle of sex-love or function of fertilization develop within the individual from its lowest elementary stage to a higher and harmonious perfection. In other words, the higher expression of sex-love or a higher function of fertilization must be developed within the individual like any other function or expression of life which is not elementary.

From this scientific fact it is evident that the individual must be trained and instructed either through his own experience or through the experience of others in order to develop the highest expression of sex-love. While hereditary knowledge or what was once called instinct may be a certain guide in its development, yet heredity is only the accumulated experiences of our ancestors, and if the basic life power of intelligence was not used as a guide in all experiences there never could be a higher development of life in any form.

We endeavor to train and guide the evolving [88]

individual in all other expressions of life through the experience and knowledge gained by others, but when it comes to this vital function of fertilization, which exerts a far greater and deeper influence upon the individual life, health and well-being than any other power, our hypocritical conventionality throws a chilling blanket of prudery over the perplexed and inquiring mind. In view of the fact that we now know the fertilizing nature of sex-love and its vital influence upon individual well-being when properly expressed, is it not more than criminal folly to continue to teach that it is a shameful and vicious function, and thus allow thousands to ruin and destroy their lives through its unnatural expression?

The simple knowledge that sex-love has a great and primary fertilizing power—a SELF-fertilizing power—for those who express it properly, will have a great influence in guiding the individual to lead a rational sex life.

If "instinct" or hereditary knowledge were sufficient to guide in this matter, then sex-love would never have reached any higher develop-

ment than is found in the uni-celled protozoa. If it is essential to instruct the evolving generation in the experiences which others have had through the activities of life, is it not just as essential to instruct them in the harmonious, elevating, healthful sex life which others have had? And how to gain the one and avoid the other?

It is a well-known fact that there is a great difference in the loving impulse or the developed capacity to express the fertilizing function, in different persons, just as there is a great difference in any other function of life; and the laws of sex as outlined in this study show us clearly just why this must be true. Yet in the face of this fact, our orthodox marriage laws decree that when two are once tied together they should remain tied for life, although there may be as much difference in the development of their functional fertilizing capacity as there is between light and darkness.

And to make such a decree more cruel and cold-blooded on the part of those who advocate it in sonorous tones from pulpit and editorial sanctum, no instructions are permitted to be [90]

given on the fertilizing nature of sex-love, either before or after the "knot-tying."

"Marriage and divorce evils" and their deplorable results on racial life will never be cured until there is a general instruction permitted on this subject and a diffusion of scientific facts and experimental knowledge gained by past generations, which each generation has an ethical right to know in order to gain greater power for its own advancement, and not until there is a higher ideal development of sex-love and a thorough knowledge of its fertilizing nature gained by every individual, to take the place of the erroneous conceptions prevailing in the popular mind and weed out the cancerous sensuality which is now rapidly destroying our civilized races.

There is another important principle involved in these anabolic and katabolic laws of life, which has not even been referred to, for fear of making this study too long and involved, and that is its influence in equalizing or unequalizing a social organization, and its power to hold the katabolic

and anabolic minds of the social units in a psychic equilibrium.

A healthy social organization must have a well-balanced metabolic activity the same as a physical body. If its social metabolism is carried too far in an extreme kinetic direction it must lead to destruction, and the same result is accomplished if it is carried too far in a stagnant conserving anabolic direction. In the study of the historical social organizations no more striking fact is presented than that one after the other foundered on either the rock of anabolic stagnation or kinetic exhaustion.

Only such organizations can endure where the organized metabolic activity is held in a plastic fertilized equilibrium.

In this respect a complex social organization can be no different than the units out of which it is composed and the co-operative fertilizing manner in which its social activities are conducted. From the very nature of these metabolic laws of life and of organization it is evident that a healthy, progressive social organization cannot be maintained unless there is a complete fertilizing [92]

co-operative activity taking place between all the anabolic and katabolic units which compose it, and in every detail and department of the organization, from the greatest to the smallest, there must be an equilibrium maintained between the extreme tendencies of maleness and femaleness.

A further discussion of this interesting and important social principle must, however, be left for some future occasion.

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